Targeted Brownfield Assessment Loren Berg Chevrolet, Newberg, Oregon

Project Overview

In May 2001, the Oregon Department of Environmental Quality (DEQ) completed a Targeted Brownfield Assessment (TBA) at the Loren Berg Chevrolet site at 411 E. First St. in Newberg, under a Cooperative Agreement with EPA Region 10 (see map below for site location). The purpose of the TBA was to provide information to help the City of Newberg decide whether to acquire the property, as part of a long-term plan to establish a "Yamhill Showcase" commercial district in downtown Newberg.

Site Background

The Loren Berg site, one of two adjacent tax lots on the same city block, operated as an auto dealership/service center from 1934 until April 2001, when the business completed its move to another location. There was also a gas station at the southeast corner of the site until the 1950s. Environmental investigations that began in 1987 focused on a leaking underground storage tank (UST) containing waste oil; the tank was removed, along with all accessible contaminated soil. A gasoline UST that appeared to be in good condition was decommissioned in place. Samples taken in 2000 from the lot immediately to the north revealed petroleum and solvents in soil and shallow groundwater; the data suggested that the Loren Berg site might be the source of this contamination. In addition, there were other concerns needing investigation at Loren Berg:



- 1. The dealership had filled two sumps with concrete in 1992 without sampling underlying soils;
- 2. The dealership had taken three underground hydraulic hoists out of service due to leaking fluid that could have contained polychlorinated biphenyls (PCBs);
- 3. A heating oil UST was discovered on the north side of the building; and
- 4. PCB-containing light ballasts and asbestos-containing materials were present in building flooring and in the basement boiler room.

The City of Newberg had long been interested in this downtown property, viewing it as a key to transforming this part of town into a commercial district reflecting local history. The property owner had agreed to donate the site to the City -- if the City accepted the associated environmental liability. Because it was unwilling to take on an unknown liability and had no money to investigate the site on

its own, in December 2000 the City asked DEQ to pursue TBA funding for this project.

What We Did

Soon after EPA Region 10 approved TBA funding in January 2001, DEQ convened a meeting with EPA, City of Newberg staff, the property owner, and a Loren Berg representative to tour the site and discuss project objectives and schedules. DEQ then prepared a sampling plan, based on information obtained from this scoping meeting and documents in the site file. DEQ's field team mobilized to the site in March 2001, collecting soil samples from 11 subsurface borings and water samples from the nine borings into which groundwater flowed. Except for samples collected in the basement with a hand-auger, DEQ used a hydraulic probe to obtain samples. DEQ based soil boring depths and sample locations on the sampling plan, but also used field observations such as sheen, odor, or color changes to help make these decisions. DEQ encountered the water table at depths of between 6 and 10 feet.

EPA's contract laboratories analyzed all samples for metals, volatile and semi-volatile organic compounds (VOCs/SVOCs), PCBs, and pesticides. DEQ also used a local laboratory for analysis of petroleum in soil samples. DEQ inspected the condition of asbestos-containing materials, but did not need to submit samples to a lab, since the presence of asbestos already had been confirmed.

What We Found

Soil. Various soil samples contained benzene, toluene, ethylbenzene, and xylenes (BTEX compounds), other hydrocarbons, chlorinated solvents, and the pesticides dieldrin and lindane. However, only one sample location contained any of these compounds above risk-based screening levels for the most conservative potential exposure scenario (i.e., possible residential uses in the future). Metals were not found at levels of concern, and no PCBs were detected in any sample.

Groundwater. Groundwater samples contained no PCBs or pesticides, but did contain moderate VOC concentrations in four locations around the former sumps, hoist, and tank pit. Groundwater contained elevated metal levels, but DEQ attributed these to sample turbidity, and did not consider them contaminants of concern. DEQ found 30 domestic wells registered by the Oregon Dept. of Water Resources within 1 mile of the site, but concluded they were unlikely to be used for drinking water because public water from wells south of the Willamette River serve the downtown area.

The Next Steps

DEQ recommended removal of contaminated soil from several locations on-site, as well as proper asbestos abatement if and when the current building is razed. DEQ also suggested further evaluation of possible groundwater risks and resulting remedial strategies. Finally, DEQ presented the City with worst-case cost estimates to address these items. City of Newberg officials were relieved that the TBA showed site contamination to be less significant than they originally had suspected, and decided to acquire the property with its now-defined environmental liability. The City will seek funding to complete the work DEQ has recommended, and believes that the TBA represented a major step forward in the implementation of its vision for downtown redevelopment.

For more information, please contact:

David Beam, Economic Development Coordinator/Planner, City of Newberg: 503-537-1213. *Ben Maynard*, Project Manager, Oregon DEQ (Salem): 503-378-8240, ext. 282.